bio-protocol Preprint

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Spectral decomposition

MA Magnus Andersson

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An abbreviated version of this protocol was published in Science Advances in Mar 2020

Tracking Ca2+ ATPase intermediates in real time by x-ray solution scattering

DOI: 10.1126/sciadv.aaz0981

Detailed protocol

Parameters U_red and C(dT) are optimised against the experimental data in a global fitting procedure (Eq. 2). The parameters being optimised are the rate constants for the integrated rate equations Eq. 3-5), and C(dT) is decided by the rate constants and U_red(q) is then calculated from C(dT). The optimisation procedure was performed in Matlab with the fminsearch() function and Nelder-Mead as optimisation algorithm.

How to cite:（Readers should cite both the Bio-protocol preprint and the original research article where this protocol was used）

1. Andersson, M. (2022). Spectral decomposition. Bio-protocol Preprint. bio-protocol.org/prep1680.
2. Ravishankar, H., Pedersen, M. N., Eklund, M., Sitsel, A., Li, C., Duelli, A., Levantino, M., Wulff, M., Barth, A., Olesen, C., Nissen, P. and Andersson, M.(2020). Tracking Ca2+ ATPase intermediates in real time by x-ray solution scattering . Science Advances 6(12). DOI: 10.1126/sciadv.aaz0981

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